

For 6000 VA 4U uninterruptible power supply and 6000 VA 3U extended battery module

Use the instructions in this document to install the IBM® 6000 VA LCD 4U Rack UPS and IBM 6000 VA UPS 3U Extended Battery Module in a rack cabinet.

Review the documentation that comes with your rack cabinet for safety and cabling information.

When you install the uninterruptible power supply or extended battery module in a rack cabinet, observe the following precautions:

- The extended battery module and uninterruptible power supply internal battery and chassis are heavy. Make sure that you have the minimum number of persons and equipment that are required to lift the components. See step 7e on page 5 and Table 1 on page 6.
- Make sure that the room air temperature is below 35°C (95°F).
- Do not block any air vents; usually 15 cm (6 in.) of air space provides proper airflow.
- Plan the device installation starting from the bottom of the rack cabinet.
- Install the heaviest device in the bottom of the rack cabinet.
- Do not extend more than one device out of the rack cabinet at the same time.
- Connect all power cords to properly wired and grounded electrical outlets.
- Do not overload the power outlet when you install multiple devices in the rack cabinet.

You will need a Phillips screwdriver to install the uninterruptible power supply or extended battery module in a rack cabinet.

Note: The illustrations in this document might differ slightly from your hardware.

The following parts come with the rack mounting kit:

- One right adjustable rail
- One left adjustable rail
- Four adapter plates with adhesive (for round hole racks)
- Sixteen M5 x 16 mm Phillips screws

Note: Removing the rack doors and side panels might make installation easier. See the rack cabinet documentation for more information.





DANGER

Electrical voltage and current from power, telephone, and communication cables are hazardous.

To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- · Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described below when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

- 1. Turn everything OFF (unless instructed otherwise).
- 2. Remove power cords from the outlet.
- **3.** Remove the signal cables from connectors.
- 4. Remove all cables from devices.

To Connect:

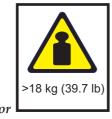
- 1. Turn everything OFF (unless instructed otherwise).
- 2. Attach all cables to devices.
- 3. Attach signal cables to connectors.
- 4. Attach the power cords to outlets.
- 5. Turn device ON.

(D005)



CAUTION:







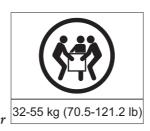
The weight of this part or unit is between 18 and 32 kg (39.7 and 70.5 lb). It takes two persons to safely lift this part or unit. (C009)



CAUTION:







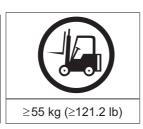
The weight of this part or unit is between 32 and 55 kg (70.5 and 121.2 lb). It takes three persons to safely lift this part or unit. (C010)



CAUTION:





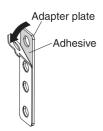


The weight of this part or unit is more than 55 kg (121.2 lb). It takes specially trained persons, a lifting device, or both to safely lift this part or unit. (C011)

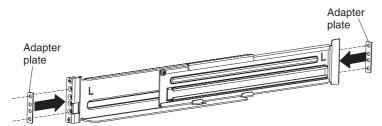
Installing an uninterruptible power supply or extended battery module in the rack cabinet

To install an uninterruptible power supply or extended battery module in the rack cabinet, complete the following steps:

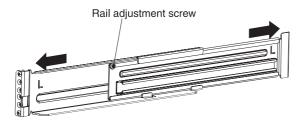
- 1. **For racks with round holes only:** Install one adapter plate on each of the ends of the right and left rails:
 - a. Locate the four adapter plates that come in the rail kit.
 - b. Peel off the covering that protects the adhesive side of the adapter plate.



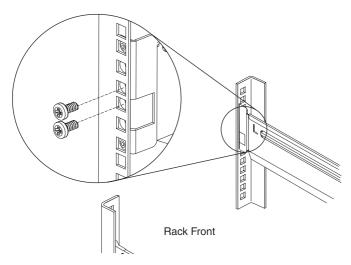
c. Align the adapter plate holes with the holes on one end of a rail.



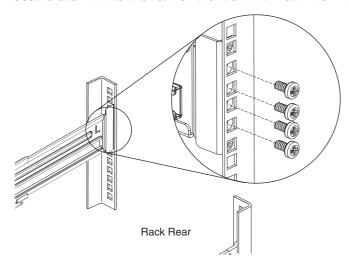
- d. Press firmly to adhere the adapter plate to the end of the rail.
- e. Repeat step 1b on page 3 to step 1d to attach the other adapter plates to the ends of the rails.
- 2. Loosen the rail adjustment screw and adjust the left and right rail length to the depth of the rack cabinet.



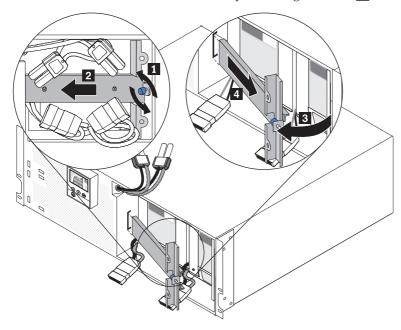
- 3. Select a location in the bottom of the rack cabinet for the uninterruptible power supply or extended battery module.
- 4. Secure each rail to the front of the rack with two M5 x 16 mm screws. Make sure that the rails are on the inside of the rack-cabinet mounting flanges and the letter on each rail faces the inside of the rack.



5. Secure each rail to the rear of the rack with four M5 x 16 mm screws.

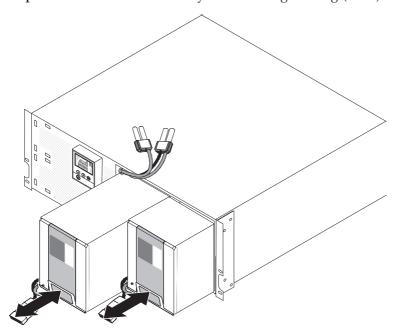


- 6. Tighten the rail adjustment screws in the middle of each rail.
- 7. **For uninterruptible power supply installation only:** To reduce the weight of the uninterruptible power supply, remove the internal battery modules:
 - a. Loosen the thumbscrew on the battery retaining bracket 1.



- b. Slide the battery retaining bracket to the left 2.
- c. Rotate the battery retaining bracket out 3.
- d. Slide the battery retaining bracket to the right and remove it 4.
- e. Use the plastic tabs to pull both battery modules partially out of the bay.

Important: Each internal battery module weighs 24 kg (53 lb) and requires two people to lift it.

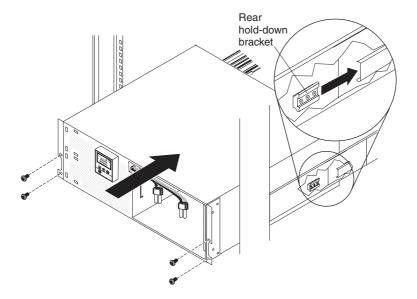


- f. With two people, carefully pull one battery module fully out of the bay and place it on a sturdy, flat surface. Repeat for the second battery module.
 - If you are installing another uninterruptible power supply, repeat step 7 on page 5.
- 8. The uninterruptible power supply and extended battery module are very heavy. See the following table to determine the handling requirements for installing these devices.

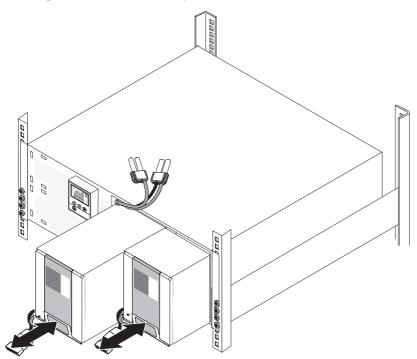
Table 1. Uninterruptible power supply and extended battery module handling requirements

Machine type-model or part number	Product description	Weight	Handling requirement
5395-6AX, 5395-6KX	6000 VA 4U rack uninterruptible power supply	24 kg (53 lb) (without internal battery modules)	Two persons
69Y1984	6000 VA 3U extended battery module	59 kg (130 lb)	Specially trained persons, a lifting device, or both

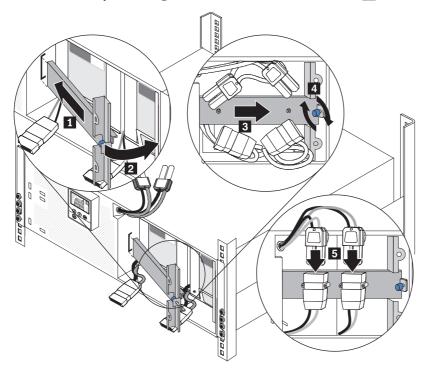
9. Align the rear hold-down brackets on the sides of the uninterruptible power supply or extended battery module with the inner rails. Carefully slide the uninterruptible power supply or extended battery module into the rack cabinet.



- 10. Secure the front of the uninterruptible power supply or extended battery module to the rack cabinet with four M5 x 16 mm screws.
- 11. **For uninterruptible power supply installation only:** To reinstall the internal battery modules, complete the following steps:
 - a. Each internal battery module weighs 24 kg (53 lb) and requires two people to lift it. With two people, carefully slide one internal battery module into the uninterruptible power supply. Repeat this step for the second battery module.



b. Slide the battery retaining bracket to the left into the slot 1.



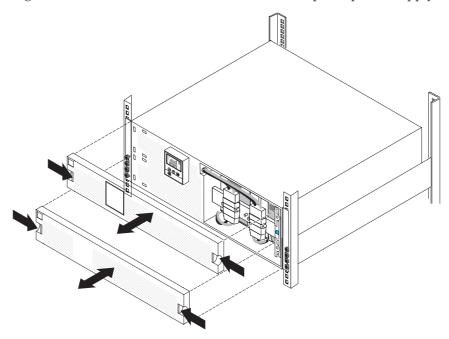
- c. Rotate the battery retaining bracket toward the uninterruptible power supply **2**. Make sure that the internal battery connectors are out of the way.
- d. Slide the battery retaining bracket to the right 3.
- e. Tighten the thumbscrew on the battery retaining bracket 4.
- 12. Connect each internal battery connector **5** and attach the connectors to the battery retaining bracket between the studs.

Note: A small amount of arcing might occur when you connect the batteries. This is normal and does not damage the unit or present any safety concern.

13. Install the bezel:

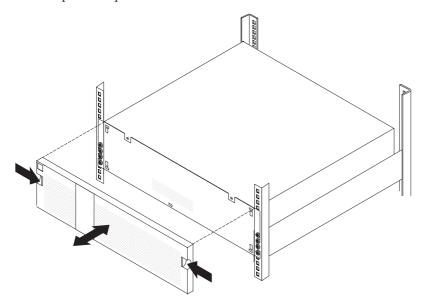
• For an uninterruptible power supply:

- a. Locate the upper and lower 2U bezels that come with the uninterruptible power supply. The upper bezel has an opening for the liquid crystal display (LCD).
- b. To install the upper bezel, press the two side latches toward each other, align the bezel so that it goes over the LCD on the front of the uninterruptible power supply, and snap it into place.



c. To install the lower bezel, press the two side latches toward each other, align the bezel underneath the upper bezel, and snap it into place.

• For an extended battery module: Locate the bezel that comes with the extended battery module. Press the two side latches toward each other, align the bezel with the extended battery module, and snap it into place.



14. Remove the clear protective film that covers the LCD on the front of the uninterruptible power supply.

For more information about installing and operating the uninterruptible power supply and extended battery module, see the *Installation and Maintenance Guide* that comes with the uninterruptible power supply.

Store this information with your uninterruptible power supply documentation for future use.

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